

What is claimed is:

1. A digital still camera for carrying out a first exposure without a flashlight and a second exposure with a flashlight,  
5 said digital still camera comprising:

a photometric device for measuring subject brightness;  
exposure determining circuit for determining exposure conditions in said first exposure to obtain proper exposure amount according to said subject brightness measured by said  
10 photometric device, and for determining exposure conditions in said second exposure to satisfy the following formula;

$$AV_1 + TV_1 - SV_1 + 2 \leq AV_2 + TV_2 - SV_2,$$

15 wherein  $SV_1$ ,  $AV_1$ , and  $TV_1$  represent each APEX value of a photographic sensitivity, an aperture value, and a shutter speed in said first exposure, and  $SV_2$ ,  $AV_2$ , and  $TV_2$  represent each APEX value of said photographic sensitivity, said aperture value, and said shutter speed in said second exposure;

20 a white balance adjustment circuit for adjusting white balance of an image obtained in said first exposure with a parameter according to available light, and for adjusting said white balance of said image obtained in said second exposure with a parameter according to flashlight; and

25 an image process circuit for creating a composite image by synthesizing images obtained in said first exposure and said second exposure.

2. A digital still camera as recited in claim 1, wherein  
30 said image process circuit corrects density of said composite

image.

3.A digital still camera as recited in claim 2, wherein said second shutter speed is equal to or less than 1/500 sec.

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4.A digital still camera as recited in claim 2, wherein the upper limit of said first photographic sensitivity is determined within a range from ISO 640 to ISO 1600.

10 5.A digital still camera as recited in claim 2, said exposure determining circuit determines said exposure conditions to satisfy following formulae;

$$AV_1 + TV_1 - SV_1 + 5 \leq 6$$

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$$AV_2 + TV_2 - SV_2 + 5 \geq 10.$$

6.A digital still camera as recited in claim 2, further comprising a distance measuring device for measuring a subject distance of a main subject,

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wherein said exposure determining circuit determines said photographic sensitivity in said second exposure such that said subject distance remains within a flashlight effective distance,

25 wherein when following formula is not satisfied, said exposure determining means decreases said photographic sensitivity of said second exposure to satisfy said formula;

$$AV_1 + TV_1 - SV_1 + 2 \leq AV_2 + TV_2 - SV_2.$$

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7.An imaging method for carrying out first exposure

without a flashlight and a second exposure with a flashlight,  
and obtaining a composite image by synthesizing images obtained  
in said first and second exposures, said imaging method  
comprising the steps of:

- 5           measuring subject brightness;
- determining exposure conditions in said first exposure  
to obtain proper exposure amount according to said subject  
brightness;
- determining exposure conditions in said second exposure  
10   to satisfy the following formula;

$$AV_1 + TV_1 - SV_1 + 2 \leq AV_2 + TV_2 - SV_2,$$

          wherein  $SV_1$ ,  $AV_1$ , and  $TV_1$  represent each APEX value of a  
15   photographic sensitivity, a first aperture value, and a shutter  
speed in said first exposure, and  $SV_2$ ,  $AV_2$ , and  $TV_2$  represent each  
APEX value of said photographic sensitivity, said second  
aperture value, and said second shutter speed in said second  
exposure;

- 20           adjusting white balance of said image obtained in said  
first exposure by a parameter according to available light; and
- adjusting said white balance of said image obtained in said  
second exposure by a parameter according to flashlight.

25           8. An imaging method as recited in claim 7, further  
comprising the step of correcting density of said composite.

          9. An imaging method as recited in claim 8, wherein said  
second shutter speed is equal to or less than 1/500 sec.

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10. An imaging method as recited in claim 8, wherein the upper limit of said first photographic sensitivity is determined within said range from ISO 640 and ISO 1600.

5 11. An imaging method as recited in claim 8, further comprising the step of:

determining said exposure conditions to satisfy the following formulae,

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$$AV_1 + TV_1 - SV_1 + 5 \leq 6$$
$$AV_2 + TV_2 - SV_2 + 5 \geq 10.$$

12. An imaging method as recited in claim 8, further comprising the steps of:

15 measuring the subject distance of a main subject;

determining said photographic sensitivity in said second exposure such that said subject distance remains within a flashlight effective distance; and

decreasing said photographic sensitivity in said second exposure to satisfy the following formula, when said formula is not satisfied,

$$AV_1 + TV_1 - SV_1 + 2 \leq AV_2 + TV_2 - SV_2.$$

13. An exposure decision method for determining exposure conditions in a first exposure without a flashlight and in a second exposure with a flashlight, said exposure decision method comprising the steps of:

measuring subject brightness;

25 determining exposure conditions in said first exposure to obtain proper exposure amount according to said subject

brightness;

determining exposure conditions in said second exposure to satisfy the following formula;

5            $AV_1 + TV_1 - SV_1 + 2 \leq AV_2 + TV_2 - SV_2,$

wherein  $SV_1$ ,  $AV_1$ , and  $TV_1$  represent each APEX value of a photographic sensitivity, an aperture value, and a shutter speed in said first exposure, and  $SV_2$ ,  $AV_2$ , and  $TV_2$  represent each  
10 APEX value of said photographic sensitivity, said aperture value, and said shutter speed in said second exposure.

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